

REMARKS

Claims 1-38 are pending in this application. Of these claims, Claims 17-29 and 33-35 have been previously withdrawn. Claims 1-16, 30-32 and 36-38 stand rejected. Applicant amends Claims 1-12, 14, 15, 30-32, and 36-38, and cancels Claim 13. Claims 39-41 are new. Applicant respectfully requests reconsideration and favorable action in this case in view of the following remarks.

Claim Rejections - 35 USC § 102

Claims 1-5, 12-13, 15-16, 30, 32, 36 and 38 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,417,692 to *Goble et al.* ("*Goble*"). Applicant respectfully traverses these rejections for the reasons set forth below.

Amended Claim 1 is directed to a bone anchor including a screw portion configured to penetrate a bone. The screw portion includes a tip at a first end of the screw portion, and a retention thread extending at least part of the length of the screw portion. The bone anchor also includes a protrusion adjacent a second end of the screw portion opposite the first end. The protrusion includes a rounded interior surface enclosing a protrusion recess and a plurality of external sides forming a shape. The rounded interior surface includes a recessed thread configured to retain a threaded component at least partially in the protrusion recess. The protrusion has a maximum width that is less than a maximum diameter of the screw portion such that a shoulder is formed where the protrusion meets the second end of the screw portion.

The Office Action rejects Claim 1. It contends that each of the limitations of Claim 1 is disclosed by *Goble* and that Figure 10 of *Goble* discloses "a protrusion with a hollow interior portion (19) with threads (see Fig. 10) configured to retain a component therein." Office Action at 3. The cited Figure of *Goble* does not disclose, teach, or suggest a recessed thread configured to retain a threaded component. Rather, *Goble* discloses "a plurality of closely spaced grooves, identified as threads 21." (Col. 7, lines 1-2). Such closely spaced grooves are configured to allow the ring portion of a spring collet to seat and lock in the cavity. (Col. 6, lines 33-39). Thus, the closely spaced grooves are configured to allow the components of *Goble* to snap together at a collet and barrel interface. (Col. 1, line 49; Col. 5,

lines 38-39). Accordingly, the cited sections of *Goble* do not disclose, teach, or suggest a recessed thread configured to retain a threaded component.

For at least this reason, Applicant respectfully contends that *Goble* does not disclose, teach, or suggest each of the limitations of Claim 1 and respectfully requests that the rejection of Claim 1 be withdrawn.

New Claim 39 depends from Claim 1 and incorporates all the limitations thereof. Claim 39 further includes limitations directed to a shoulder including a shoulder surface that is oriented generally perpendicular to a longitudinal axis of the screw portion.

Goble does not disclose, teach, or suggest a shoulder including a shoulder surface oriented generally perpendicular to a longitudinal axis of the screw portion. Therefore, Claim 39 is patentably distinguishable from *Goble* for at least this reason, as well as the reason discussed above with regard to Claim 1.

Amended Claims 2-5 each depend directly from Claim 39 and incorporate all the limitations thereof. Therefore, Claims 2-5 are each patentably distinguishable from *Goble* for at least the same reasons as discussed above with regard to Claims 1 and 39.

Amended Claim 12 is directed to a driver for inserting a bone anchor into a bone. The driver includes a tip portion having a first diameter. The tip portion includes a driver edge, an external surface, and a plurality of internal surfaces forming a shape and enclosing a driver recess. The driver recess is configured to retain an insert positioned at least partially within a threaded protrusion recess of the protrusion of the bone anchor. The insert provides a friction fit between the driver and the bone anchor during insertion of the bone anchor. The bone anchor also includes a second portion adjacent the tip portion. The second portion has a second diameter that is greater than the first diameter such that a rim is formed where the tip portion meets the second portion. The tip portion positions around a protrusion of a bone anchor when the driver is used to insert the bone anchor into a bone. The driver edge contacts a shoulder of the bone anchor during insertion.

The Office Action contends that *Goble* discloses an insert that is capable of being inserted into the threaded bore of the bone screw portion. However the turning tool 23 shown in Figure 3 of *Goble* does not disclose these limitations as contended by the Office Action. Rather, the turning tool 23 of *Goble* has a "cavity formed therein whose interior wall is sided, like that of the sided tool engaging section 22, and is for making contact therewith to transfer

tool 23 turning into member 11 or 12." (Col. 7, lines 38-41). Accordingly, *Goble* does not disclose, teach, or suggest a driver recess configured to retain an insert positioned at least partially within a threaded protrusion recess of the protrusion of the bone anchor to provide a friction fit between the driver and the bone anchor during insertion of the bone anchor.

For at least this reason, Applicant respectfully contends that *Goble* does not disclose, teach, or suggest each of the limitations of Claim 12 and respectfully requests that the rejection of Claim 12 be withdrawn.

Claim 16 depends from Claim 12 and incorporates all the limitations thereof. Therefore, Claim 16 is patentably distinguishable from *Goble* for at least the same reason as discussed above with regard to Claim 12.

Amended Claim 15 includes limitations directed to a tip portion wherein the distance between the driver edge and the rim is approximately equal to a distance between the shoulder of the bone anchor and an end of the protrusion.

The Office Action contends that the driver 23 shown in Figure 3 of *Goble* discloses these limitations. However, the sections of *Goble* that discusses the driver 23 does not disclose, teach, or suggest a tip portion of the driver wherein a distance between the driver edge and the rim of the driver is approximately equal to a distance between the shoulder of the bone anchor and an end of the protrusion. (Col. 7, lines 34-41 and lines 56-61).

For at least this reason, Applicant respectfully contends that *Goble* does not disclose, teach, or suggest each of the limitations of Claim 15 and respectfully requests that the rejection of Claim 15 be withdrawn.

Similar to Claim 1, amended Claims 30 and 36 each include limitations generally directed to a protrusion enclosing a threaded recess that is configured to retain a threaded component at least partially in the threaded recess. The Office Action rejects Claims 30 and 36 on the same grounds as it rejects Claim 1. Accordingly, Applicant contends that Claims 30 and 36 are each patentably distinguishable from *Goble* for at least the same reasons as discussed above with regard to Claim 1.

New Claims 40 and 41 depend from Claims 30 and 36 respectively and incorporate all the respective limitations thereof. Each of Claims 40 and 41 also include limitations generally directed to a shoulder including a shoulder surface that is oriented perpendicular to a longitudinal axis of the screw portion. As stated above with regard to Claim 39, *Goble* does

not disclose this limitation. Therefore, Applicant contends that Claims 40 and 41 are each patentably distinguishable from *Goble* for at least the same reasons discussed above with regard to their respective base claims.

Amended Claims 32 and 38 depend from Claims 40 and 41 respectively and incorporate all the respective limitations thereof. Therefore, Applicant respectfully contends that Claims 32 and 38 are each patentably distinguishable from *Goble* for at least the same reasons as discussed above with regard to their respective base claims.

Claim Rejections - 35 USC § 103

Claims 6-9 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Goble*. Applicant respectfully traverses these rejections for the reasons set forth below.

Amended Claims 6-9, and 14 depend from Claims 39 and 12 respectively and incorporate all the respective limitations thereof. In rejecting these claims, the Office Action relies on *Goble* as disclosing each of the limitations of each Claim's respective base claims. As discussed above, *Goble* does not disclose, teach, or suggest each of the limitations of the respective base claims, and the Examiner's shape and material obviousness arguments (with which Applicant does not agree) do not cure this deficiency. Therefore, Applicant contends that Claims 6-9, and 14 are allowable for at least the reasons discussed above with regard to their respective base claims. Accordingly, Applicant respectfully requests that the rejections of Claim 6-9, and 14 be withdrawn.

Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Goble* in view of U.S. Patent No. 5,662,683 to Kay ("*Kay*"). Claims 11, 31 and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Goble* in view of U.S. Patent No. 6,333,971 to McCrory et al. ("*McCrory*"). Applicant respectfully traverses these rejections for the reasons set forth below.

Amended Claims 10-11, 31, and 37 each depend from Claims 39, 40, and 41 respectively and incorporate all the respective limitations thereof. In rejecting these claims, the Office Action relies on *Goble* as disclosing each of the limitations of each Claim's respective base claims. As discussed above, *Goble* does not disclose, teach, or suggest each of the limitations of the respective base claims, and neither *Kay* nor *McCrory* cures this deficiency. Therefore, Applicant contends that Claims 10-11, 31, and 37 are allowable for at

least the same reasons discussed above with regard to their respective base claims. Accordingly, Applicant respectfully requests that the rejections of Claims 10-11, 31, and 37 be withdrawn.

CONCLUSION

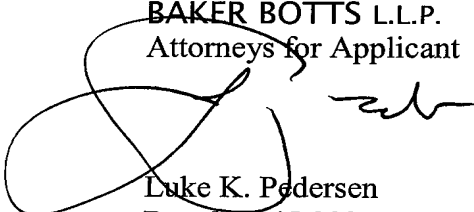
Applicant has made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests allowance of Claims 1-12, 14-16, 30-32, and 36-41.

No additional fee is believed to be due. However, the Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 02-0384 of Baker Botts L.L.P.

If there are matters that can be discussed by telephone to further the prosecution of this application, Applicant respectfully requests that the Examiner call his attorney at the number listed below.

Respectfully submitted,

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